A CASE OF POISONING BY AMANITA PHALLOIDES.

OTTO E. JENNINGS.

The writer's attention was recently called by Judge J. D. Shafer, of Pittsburg, to a newspaper account of a fatal case of mushroom poisoning at the little village of Deep Valley in the extreme southwestern point of Pennsylvania, and, acting upon Judge Shafer's urgent suggestion, the case was immediately investigated.

It was found that the village physician, Dr. Philip Dinsmore, together with three other members of the family and Mr. Frank Roberts, the man-of-all-work, had eaten with the evening meal, between six and seven o'clock, Sunday, August 4, a mess of mushrooms gathered that afternoon by Mr. Roberts. There had been about a quart of the mushrooms and they had been prepared by frying in flour and butter. All ate of the mushrooms excepting one little girl.

Between one and two o'clock the next morning all who had eaten of the mushrooms were taken violently sick, vomiting excessively and having an extreme diarrhoea. These symptoms continuing during Monday, Dr. H. C. Rice, of Freeport, Pa., was summoned and a treatment begun consisting of the sub-cutaneous injection of *atropine* and as far as possible the administration of narcotics and oleaginous purgatives.

The vomiting and diarrhoea continued for about three days, other symptoms being subnormal temperature, more or less delirium, and in the case of Dr. Dinsmore, severe muscular cramps of the limbs and extremities, and, evidently, of the muscular walls of the abdomen also, the patient dying early Thursday morning.

At the time of the writer's visit (Saturday, August 10) Mr. Roberts had so far recovered as to be about, but the other three patients were still confined to their beds. The vomiting and diarrhoea had ceased, but there was considerable enlargement of the liver with distension of the gall-bladder and the patients were becoming jaundiced.

Saturday morning Mr. Roberts escorted the writer to a little patch of about two acres of woods, lying at the base of the hillside along the creek, where the mushrooms had been gathered for the fatal meal. Two species were abundant, *Cantharellus** and the white form of *Amanita phalloides* Fr., and the latter species was indicated as the one composing the greater part of the mess taken. Other species indicated as having been also

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* The writer is indebted to Prof. D. R. Sumstine for verification of the identications.

selected were *Amanitopsis vaginata* (Bull.) Roz., and *Russula emetica* Fr. — a very few. The only test applied in selecting the fungi had apparently been the pleasing appearance and the tenderness of the mushroom. Roberts' indentification of *Amanita* as composing the greater part of those eaten was independently verified by one of the patients, Dr. Dinsmore's sister, who had prepared the fungi for eating.

From the evidence obtained it is quite clear that the poisoning was due to the deadly Amanita, and it will be noticed that the symptoms exhibited were in close agreement with those ascribed to *phallin* poisoning by chestnut,** although Dr. Rice characterized the intestinal discharges as "serous" and not assuming the "rice-water" condition, and neither extreme salivation nor decided suppression of the urine was noticed.

In connection with the supposed action of *phallin* in decomposing the blood corpuscles and in bringing about the escape of the blood serum from the system by way of the alimentary canal it may be mentioned as a partial confirmation that the undertaker experienced considerable trouble in preparing the corpse for burial,— less than half the usual amount of blood could be extracted; thus indicating a depletion of blood supply before death occurred.

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** Chestnut, V. K. Circular No. 13, Div. Botany, U. S. Dept. Agriculture.

A NEW SPECIES OF PROTOMYCES.

J. J. DAVIS.

For the purpose of securing a name under which to distribute specimens in *Fungi Columbiani* I submit the following:

Protomyces gravidus n. sp.—Causing hypertrophic swellings on stems, branches, petioles and midribs. Spores, either sub-epidermal or in the vascular bundles but not usually in both, numerous, surface more or less irregularly uneven, generally globose but some times elliptical, ovate or polygonal, 30-55 x 27-40 μ, plurinucleate; epispore thin (1-3 μ), brown; endospore in maturity thick (3-5μ), hyaline. On *Bidens cernua* L. and *Bidens connata* Muhl., Dousman; on the same hosts and sparingly on *Bidens frondosa* L., Racine; on *Bidens cernua* L., Berryville, all in Wisconsin. July to November.

What I have called the endospore should rather perhaps be considered a peripheral layer of cytoplasm in a resting condition the true endospore being a hyaline membrane 1 μ or less thick.